

**FACT SHEET**

as required by LAC 33:IX.3109 for major LPDES facilities, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0042064; AI 30331; PER20080001** to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

I. **THE APPLICANT IS:** Jefferson Parish Department of Sewerage  
Bridge City Wastewater Treatment Plant  
1221 Elmwood Park Blvd., Suite 803  
Jefferson, LA 70123

II. **PREPARED BY:** Angela Marse

**DATE PREPARED:** April 1, 2009

III. **PERMIT ACTION:** Issue LPDES permit LA0042064, AI30331

LPDES application received: December 3, 2008

LPDES permit issued: January 1, 2003

LPDES permit expired: December 31, 2008

IV. **FACILITY INFORMATION:**

A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works (POTW) serving the communities of Bridge City, Nine Mile Point, Avondale, and Waggaman.

B. The permit application does indicate the receipt of industrial wastewater. Jefferson Parish Landfill and Northrop-Grumman Ship Systems-Avondale discharge directly to the POTW.

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C. The facility is located at 1400 Hwy. 90 in Bridge City, Jefferson Parish.

D. The treatment facility consists of grit removal, primary clarification, and trickling filters with a synthetic media followed by secondary clarification and solids contact. Disinfection is by chlorination.

E. Outfall 001

Discharge Location: Latitude 29°55'25" North  
Longitude 90°10'15" West

Description: treated sanitary wastewater

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Design Capacity: 7.23 MGD

Type of Flow Measurement which the facility is currently using: Totalizing Meter

## V.

**RECEIVING WATERS:**

The discharge is into the Mississippi River in segment 070301 of the Mississippi River Basin. This segment is not listed on the 303(d) list of impaired waterbodies.

The **critical low flow** (7Q10) of the Mississippi River is 141955cfs.

The **hardness value** is 153 mg/l and the **fifteenth percentile value for TSS** is 31 mg/l.

The designated uses and degree of support for Segment 070301 of the Mississippi River Basin are as indicated in the table below<sup>1/</sup>:

Overall Degree of Support for Segment	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Full	Full	Full	Full	N/A	Full	N/A	N/A

<sup>1/</sup> The designated uses and degree of support for Segment 070301 of the Mississippi River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

Section 303(d) of the Clean Water Act as amended by the Water Quality Act of 1987, and EPA's regulations at 40 CFR 130 require that each state identify those waters within its boundaries not meeting water quality standards and develop plans for those waterbodies to meet water quality standards.

Segment 070301, the Mississippi River from Monte Sano Bayou to Head of Pass, Mississippi River Basin meets all its designated uses and is not impaired. Therefore, it is not on the 2006 303(d) List of Impaired Waterbodies. No Total Daily Maximum Load (TMDL) Studies will be performed for this Segment.

VI. **ENDANGERED SPECIES:**

The receiving waterbody, Subsegment 070301 of the Mississippi River Basin, has been identified by the U.S. Fish and Wildlife Service (FWS) as habitat for the *Pallid sturgeon*, which is listed as a threatened/endangered species. This draft permit has been sent to the FWS for review. This strategy was submitted with a letter dated November 17, 2008 from Rieck (FWS) to Nolan (LDEQ). As set forth in the Memorandum of Understanding between the LDEQ and the FWS, and after consultation with FWS, LDEQ has determined that the issuance of the LPDES permit is not likely to have an adverse affect upon the *Pallid sturgeon* since effluent limitations are established in the permit to ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

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**VII. HISTORIC SITES:**

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

**VIII. PUBLIC NOTICE:**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation  
Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mrs. Angela Marse  
Water Permits Division  
Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

**IX. PROPOSED PERMIT LIMITS:**

**Final Effluent Limits:**

**OUTFALL-001**

The previous permit was issued in January, 2003. At that time the Mississippi River Segment 070301 was listed as impaired for mercury, pesticides, phosphorus, nitrogen, and pathogen indicators. The previous permit contained monitoring requirements for total phosphorus and total kjeldahl nitrogen (TKN) to address impairments. Total phosphorus was never reported above 2 mg/l. The geometric mean for nitrogen was 28 mg/l. Since the issuance of the previous permit, new water quality data has been collected. The new data indicates subsegment 070301 meets all designated uses and is not on the 303(d). Therefore, monitoring requirements for phosphorus and TKN have not been included in the draft permit.

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

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Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD <sub>5</sub>	1809	30 mg/l	45 mg/l	Limits are set in accordance with the Statewide Sanitary Effluent Limitations Policy (SSELP) for facilities of this treatment type and size which discharge into the Mississippi River.
TSS	1809	30 mg/l	45 mg/l	Limits are set in accordance with the Statewide Sanitary Effluent Limitations Policy (SSELP) for facilities of this treatment type and size which discharge into the Mississippi River.

**Other Effluent Limitations:****1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5., the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

**2) pH**

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C, the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

**3) Solids and Foam**

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

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**4.) Toxicity Characteristics**

Based on information contained in the permit application, LDEQ has determined there may be pollutants present in the effluent which may have the potential to cause toxic conditions in the receiving stream in violation of Section 101(a)(3) of the Clean Water Act. The State has established a narrative criteria which, in part, states that "No substances shall be present in the waters of the State or the sediments underlying said waters in quantities alone or in combination will be toxic to human, plant, or animal life..." (LAC 33:IX.1113.B.5)

LAC33:IX.1121.B.3. provides for the use of biomonitoring to monitor the effluent for protection of State waters. Whole effluent biomonitoring is the most direct measure of potential toxicity which incorporates the effects of synergism of the effluent components and receiving stream water quality characteristics. Since the critical dilution is <1%, acute biomonitoring of the effluent is required as a condition of this permit to assess potential toxicity. This is in accordance with the Water Quality Management Plan, Volume 3. The biomonitoring procedures stipulated as a condition of this permit are as follows:

The permittee shall submit the results of any biomonitoring testing performed in accordance with the LPDES Permit No. LA00042064, Part II, Section F for the organisms indicated below.

**TOXICITY TESTS****FREQUENCY**

Acute static renewal 48-hour definitive toxicity test  
Using water fleas (Daphnia pulex) EPA-821-R-02-012

1/year

Acute static renewal 48-hour definitive toxicity test  
Using fathead minnows Pimephales promelas EPA-821-R-02-012

1/year

This frequency is based on recommendation by LDEQ Biomonitoring personnel (see attached recommendation), the receiving stream, and the facility's previous biomonitoring test results.

Dilution Series – The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in toxicity tests. These additional concentrations shall be 0.10%, 0.13%, 0.18%, 0.24%, and 0.32%. The biomonitoring critical concentration is defined as 0.24% effluent. The critical dilution is calculated in Appendix B-1 of this fact sheet.

Results of all dilutions shall be documented in a full report according to the test method publication mentioned in **Part II Section F** under Whole Effluent Toxicity. This full report shall be submitted to the Office of Environmental Compliance as contained in the Reporting Paragraph located in **Part II Section F** of the permit.

The permit may be reopened to require whole effluent toxicity (WET) limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or waterbody. Modification or revocation of the permit is subject to the provisions of LAC 33:IX.2903. Accelerated or intensified toxicity testing may be required in accordance with Section 308 of the Clean Water Act.

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**5.) Toxic Substances**

Due to drinking water supply being a designated use, the permittee shall analyze the final effluent for the presence of the following toxic substances. The MQL is intended as action levels. Should a toxic substance exceed the MQL, the permittee shall determine the source of the substance and take whatever measures necessary to secure abatement in order to protect all drinking water sources downstream of the discharge. Records of any actions taken shall be made available upon request by any duly authorized regional inspectors and/or LDEQ Headquarter representatives.

A report containing the results of the lab analysis indicating if any toxic substances have exceeded the MQL including a brief summary of any abatement taken at the time, must be submitted to this Office within 20 days of completion of the analysis. **The first analysis shall be performed within six months following the effective date of the permit, and every year thereafter, by a 24-hour composite sample type.**

Reports must be submitted to the following address:

Department of Environmental Quality  
Office of Environmental Compliance  
**Enforcement Division**  
Post Office Box 4312  
Baton Rouge, Louisiana 70821-4312

**TOXIC SUBSTANCES**

<b>TOXIC SUBSTANCES (CAS NO.)</b>	<b>Required MQL (µg/l)</b>
<b>VOLATILE ORGANIC CHEMICALS</b>	
Acrolein (107-02-8)	50
acrylonitrile (107-13-1)	50
benzene (71-43-2)	10
bromodichloromethane (dichlorobromomethane) (75-27-4)	10
bromoform (tribromomethane) (75-25-2)	10
carbon tetrachloride (56-23-5)	10
chlorobenzene (108-90-7)	10
chloroform (trichloromethane)	10
chloromethane (methyl chloride) (74-87-3)	50
1,1-dichloroethane (75-34-3)	10
1,2-dichloroethane (107-06-2)	10
1,1-dichloroethylene (75-35-4)	10
dichloromethane (methylene chloride) (75-09-2)	20
cis-1,3-dichloropropene	10
trans-1,3-dichloropropene	10
ethylbenzene (100-41-4)	10

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para-dichlorobenzene	---
1,1,2,2-tetrachloroethane (79-34-5)	10
tetrachloroethylene (127-18-4)	10
toluene (108-88-3)	10
1,1,1-trichloroethane (71-55-6)	10
1,1,2-trichloroethane (79-00-5)	10
trichloroethylene (79-01-6)	10
vinyl chloride (chloroethylene) (75-01-4)	10
<b>ACID EXTRACTABLE ORGANIC CHEMICALS</b>	
2-chlorophenol (95-57-8)	10
3-chlorophenol	10
4-chlorophenol	10
2,4-dichlorophenol (120-83-2)	10
2,3-dichlorophenol	10
2,5-dichlorophenol	10
2,6-dichlorophenol	10
3,4-dichlorophenol	10
2,4-dinitrophenol (51-28-5)	50
pentachlorophenol (87-86-5)	50
phenol (108-95-2)	10
2,4,6-trichlorophenol (88-06-2)	10
<b>BASE/NEUTRAL EXTRACTABLE ORGANIC CHEMICALS</b>	
anthracene (120-12-7)	10
benzidine (92-87-5)	50
bis(2-chloroethyl)ether (111-44-4)	10
bis(2-chloro-1-methylethyl)ether (39638-32-9)	10
bis(2-ethylhexyl)phthalate (117-81-7)	10
di-n-butyl phthalate (84-74-3)	10
1,3-dichlorobenzene (541-73-1)	10
1,2-dichlorobenzene (95-50-1)	10
1,4-dichlorobenzene (106-46-7)	10
3,3-dichlorobenzidine (91-94-1)	50
diethyl phthalate (84-66-2)	10
dimethyl phthalate (131-11-3)	10
2,4-dinitrotoluene (121-14-2)	10
1,2-diphenylhydrazine (122-66-7)	20
fluoranthene (206-44-0)	10
hexachlorobenzene (118-07-1)	10
hexachlorobutadiene (87-68-3)	10
hexachlorocyclopentadiene (77-47-4)	10

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hexachloroethane (67-72-1)	20
isophorone (78-59-1)	10
nitrobenzene (98-95-3)	10
N-nitrosodimethylamine (62-75-9)	50
N-nitrosodiphenylamine (86-30-6)	20
<b>PESTICIDES &amp; PCBs</b>	
aldrin (309-00-2)	0.05
PCB's (Total)	1.0
gamma-BHC (Lindane, Hexachlorocyclohexane) (58-89-9)	0.05
chlordane (57-74-9)	0.2
4,4"DDD (TDE) (72-54-8)	0.1
4,4"DDE (72-55-9)	0.1
4,4"DDT (50-29-3)	0.1
Dieldrin (60-57-1)	0.1
endosulfan I (alpha) (115-29-7)	0.1
endosulfan II (beta) (115-29-7)	0.1
endrin (72-20-8)	0.1
heptachlor (76-44-8)	0.05
Methoxychlor	
2,3,7,8-tetrachlorodibenzo-p-dioxin (1764-01-6)	
toxaphene (8001-35-2)	5.0
2,4-dichlorophenoxyacetic acid (2,4-D) (94-75-7)	10
2-(2,4,5-trichlorophenoxy)propionic acid	4
<b>METALS</b>	
antimony (7440-36-0)	60
arsenic (7440-38-2)	10
Barium	
beryllium (7440-41-7)	5
cadmium (7440-43-9)	1
chromium III (16065-83-1)	10
chromium VI (7440-47-3)	10
copper (7550-50-8)	10
lead (7439-92-1)	5
Flouride	
mercury (7439-97-6)	0.2
nickel (7440-02-0)	40



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nitrate (as N)	
selenium (7782-49-2)	5
silver (7440-22-4)	2
thallium (7440-28-0)	10
zinc (7440-66-6)	20
<b>MISCELLANEOUS</b>	
Cyanide	20
total phenols	5

## X.

**PREVIOUS PERMITS:**

LPDES Permit No. LA0042064:

Issued: January 1, 2003

Expired: December 31, 2008

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Daily Avg.</u>	<u>Weekly Avg.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	Continuous	Recorder
BOD <sub>5</sub>	30 mg/l	45 mg/l	3/week	12-hr.composite
TSS	30 mg/l	45 mg/l	1/week	12-hr.composite
Fecal Coliform Colonies	200	400	1/day	Grab
Phosphorus	Report mg/l	Report mg/l	1/quarter	Grab
Kjeldahl Nitrogen	Report mg/l	Report mg/l	1/quarter	Grab
Toxic Substances	Report mg/l	Report mg/l	1/year	24-hr.composite
pH	---	---	1/week	Grab

The permit contains a fully approved pretreatment program.

The permit contains biomonitoring.

The permit contains pollution prevention language.

## XI.

**ENFORCEMENT AND SURVEILLANCE ACTIONS:****A) Inspections**

A review of the files indicates the following inspections were performed during the period beginning **February 8, 2007** and ending **September 17, 2008** for this facility.

Date -- February 8, 2007

Inspector - LDEQ

Findings and/or Violations -

1. The facility did not have any excursions for DMR reviewed from 4/2005-12/2006.
2. The SPCC plan is out of date. The plan says it will be updated every three years. It was last updated in 2002.
3. Raw treatment data, MWPP, and pre-treatment data are needed.

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Inspections from 9/8/08 and 9/17/08 are follow- up inspections from Hurricane Gustav and Ike. The facility was in operation.

**B) Compliance and/or Administrative Orders**

A review of the files indicates the following most recent enforcement actions administered against this facility:

**LDEQ Issuance:**

Docket # - WE-CN-08--392

Date Issued - October 7, 2008

**Findings of Fact:**

1. The permittee did not submit a permit renewal application for LA0042064 prior to the expiration of the permit on December 31, 2007. Therefore, the permit was not administratively continued.
2. The permittee caused and/or allowed the unauthorized discharge of wastewater into waters of the state. DMRs submitted since the expiration of the permit indicate the permittee continued to discharge.

**Order:**

1. The permit was ordered to cease all unauthorized discharges.
2. The permit was ordered to submit a completed renewal application.
3. The permit was ordered to comply with the terms of conditions of the expired permit LA0042064 until the renewed permit is issued.
4. The permittee was made aware of their right to appeal the action.
5. The respondent was made aware of the Department's right to seek civil penalties from the permittee.
6. A Notice of Potential Penalty was included in the compliance order.

**C) DMR Review**

A review of the discharge monitoring reports for the period beginning November, 2006 through December, 2008 has revealed the following violations:

Effluent Characteristic  
Fecal Coliform

Number of Violations  
1 (2152 col/100ml in March, 2008)

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**XII.**

**ADDITIONAL INFORMATION:**

This permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(c) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act or more stringent discharge limitations and/or additional restrictions in the futures to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's, if the effluent standard, limitations, water quality studies or TMDL's so issued or approved:

- a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b) Controls any pollutant not limited in the permit; or
- c) Requires reassessment due to change in 303(d) status of waterbody; or
- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

The Louisiana Department of Environmental Quality (LDEQ) reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Please be aware that the Department has the authority to reduce monitoring frequencies when a permittee demonstrates two or more consecutive years of compliance. Monitoring frequencies established in LPDES permits are based on a number of factors, including but not limited to, the size of the discharge, the type of wastewater being discharged, the specific operations at the facility, past compliance history, similar facilities and best professional judgment of the reviewer. We encourage and invite each permittee to institute positive measures to ensure continued compliance with the LPDES permit, thereby qualifying for reduced monitoring frequencies upon permit reissuance. If the Department can be of any assistance in this area, please do not hesitate to contact us. As a reminder, the Department will also consider an increase in monitoring frequency upon permit reissuance when the permittee demonstrates continued non-compliance.

**STORMWATER PROVISIONS**

The requirements of Part II, Section E apply to stormwater discharges associated with industrial activity as defined at LAC 33:IX.2511.B.14.i and Sector T of the LPDES Multi-Sector Stormwater Permit LAR5000. These requirements apply to point source stormwater discharges associated with domestic sewage treatment works with a design flow of 1.0 MGD or more. POTWs with flows over 1 MGD are designated as major facilities. The Bridge City Wastewater Treatment Facility has a design capacity over 1 MGD. Therefore, they will also be required to develop a Stormwater Pollution Prevention Plan to be effective six months from the effective date of the permit.

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Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 7.23 MGD.

Effluent loadings are calculated using the following example:

$$\text{BOD: } 8.34 \text{ gal/lb} \times 7.23 \text{ MGD} \times 30 \text{ mg/l} = 1809 \text{ lb/day}$$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are based on the previous permit and good compliance.

#### **Pretreatment Requirements**

Jefferson Parish does have a fully approved pretreatment program. Based upon consultation with LDEQ pretreatment personnel, pretreatment language for municipalities with industrial users on their collection system and an approved pretreatment program has been included in the permit.

XIII

#### **TENTATIVE DETERMINATION:**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in this Statement of Basis.

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#### **REFERENCES:**

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 2006.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards", Louisiana Department of Environmental Quality, 2008.

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Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program", Louisiana Department of Environmental Quality, 2008.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Jefferson Parish Department of Sewerage, Bridge City Wastewater Treatment Plant, December 3, 2008.